Sun Tie (ST)
SOLAR ELECTRIC INVERTER

Connecting The Sun To Your Utility Meter

Trace Engineering’s new Sun Tie (ST) solar electric inverters are designed, built and priced to make the benefits of site-generated PV power easy for anyone to attain. The Sun Tie operates interactively with the utility, without the use of batteries. Made specifically for new, small-scale, independent power producers, the ST is a perfect choice for anyone interested in participating in the emerging Green Power market. The ST is available in four models with output capacity of 1.0, 1.5, 2.0 and 2.5 kVA.

Distributed generation, using the power of the sun, is a win - win choice for the environment, utility companies and consumers alike. With this form of electrical distribution, solar PV power is generated and inverted at the location where it’s used. Solar electricity helps reduce the need for new large-scale—and often environmentally harmful—generating stations and distribution lines.

Consumers can have lower electricity bills because any PV power they generate is either used in their home or business or, when there is excess, sold to the utility company. “Net Metering” is one way electricity is exchanged between the power grid and solar generators. Net Metering programs are available from many utility companies, contact your local electricity provider for details.

Utilities benefit from increased solar generation by gaining the ability to resell the PV power they purchase to environmentally conscious customers at premium Green Power rates. Consumer generated, solar electricity can also help utility companies meet their growth requirements at lower capital costs.

Introducing the Sun Tie

All-in-One Design
All NEC (U.S. National Electrical Code) required DC input and AC output connections, disconnects and circuit breakers are housed within the Sun Tie’s compact case. A built in LCD panel provides easy-to-read system status and daily cumulative power production information.

Works With Any Type of PV Technology
The ST is designed to optimize the output from all types of solar electric technologies. The open circuit voltage window of the Sun Tie ranges up to 125 VDC so both conventional Crystalline and newer Thin Film PV modules can be used.

Maximum Power Point Tracking
The Sun Tie uses sophisticated software to track and adjust the output of the PV array. Our Maximum Power Point Tracking (MPPT) software, which samples once a minute, ensures complete harvest of the sun’s energy all day long.

Expandable
Multiple ST inverters can be connected to a utility grid so that additional generating capacity may be added in a fully modular manner.

High Efficiency, Long Life Design
The high frequency, solid state design of the ST inverter is extremely efficient. The inverter efficiency is over 90%, with peak efficiencies of 94%. Built and designed in the U.S.A. by Trace Engineering, makers of the worlds most reliable inverters, the Sun Tie is sure to provide many years of trouble free service and carries a two year warranty.

* The Sun Tie is shown with optional protective rain shield which is required for outdoor installation of the inverter.

Standard Features:

Sun Tie—Utility interactive inverter, 240 VAC 60 Hz output. Includes factory installed DC and AC input/output breakers, combination DC and AC lightning arrestor.

Options:
STRS—Protective rain shield, required for outdoor installation of ST Series inverters

Certifications:
UL Listed—The Sun Tie is UL Listed to UL 1741 and cUL Listed to CSA 22.2. The ST is designed to comply with IEEE 929.

Note:
ST1000 and ST2000 models do not include PV ground fault interrupters and PV combiner boards. Trace offers a PV ground fault interrupter (PVGF) which requires an enclosure (not included) and a UL Listed 10 circuit combiner box (TCB10). Both of these items can be ordered separately.

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Sun Tie

**UTILITY INTERACTIVE SOLAR ELECTRIC INVERTER**

Specifications subject to change without notice

The Sun Tie connects all the elements of a utility interactive solar electric system together.